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APPLICATION FOR PATENT

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Title: FLASH EEprom SYSTEM

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Background of the Invention

5 This invention relates generally to semiconductor electrically erasable programmable read only memories (EEprom), and specifically to a system of integrated circuit Flash EEprom chips.

10 Computer systems typically use magnetic disk drives for mass storage of data. However, disk drives are disadvantageous in that they are bulky and in their requirement for high precision moving mechanical parts. Consequently they are not rugged and are prone to reliability problems, as well as consuming significant  
15 amounts of power. Solid state memory devices such as DRAM's and SRAM's do not suffer from these disadvantages. However, they are much more expensive, and require constant power to maintain their memory (volatile). Consequently, they are typically used as  
20 temporary storage.

EEprom's and Flash EEprom's are also solid state memory devices. Moreover, they are nonvolatile, and retain their memory even after power is shut down. However, conventional Flash EEprom's have a limited  
25 lifetime in terms of the number of write (or program)/erase cycles they can endure. Typically the devices are rendered unreliable after  $10^2$  to  $10^3$  write/erase cycles. Traditionally, they are typically used in applications where semi-permanent storage of  
30 data or program is required but with a limited need for reprogramming.